

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/814,534

Filing Date:

SEP 2 0 2005

March 31, 2004

Applicant:

Aram, Farbod

**Group Art Unit:** 

2817

Examiner:

Henry Choe

Title:

Variable-Gain Constant-Bandwidth Transimpedance Amplifier

**Attorney Docket:** 

MP0426

Director of the United States Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

### I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

	B. Any patents, publications or other info 1449 or on the copies of PTO-892, but which previously cited by or submitted to the PTO ir which has been relied upon for an earlier filing.	n are not enclosed herewith, were n one of the following applications
	U.S. Serial Number	U.S. Filing Date
	C. This is a PCT application in the entry of States. A copy of the International Search Reinformation. The documents listed on the Internation on the attached Form 1449 for consideration any patent resulting from this application. If the from the US, EPO, or JPO search authorities, have been supplied to the USPTO under	port is attached for the Examiner's ernational Search report are listed by the Examiner and for listing on the International Search report was copies of these references should the trilateral agreement and are
	believed to be in the file of the above-identified	
И.	CONCISE EXPLANATION OF THE RELEVAN	CE (check <u>at least</u> one box)
	A.  Except as may be indicated below in (B) other information are in the English language (c)	
	B. A concise explanation of the relevance of information listed that is not in the English lang § 1.98(a)(3)):	
	1. See the attached foreign pater counterpart foreign application:	nt office communication from a
	2. English translations are provided:	
	3.  Other:	
	C. The following additional information consideration.	is provided for the Examiner's

IV.	CRUSS REFERENCE	TO RELATED APPLICA	ATION(5)	
	contain(s) subject ma bringing this(these) ap	tter that may be relate	ollowing co-pending application d to the present application. niner's attention, Applicant(s) do 35 U.S.C. § 122.	Ву
	<u>Serial No.</u>	Filing Date	<u>Art Unit</u>	
V.	THIS IDS IS BEING FI	LED UNDER		
	A. 37 C.F.R. § 1.97	(b): (check only one box	<b>x</b> )	
	than a continue		late of a national application other of the state of a national application other state of the s	
		in an international applic	f entry of the national stage as station (37 C.F.R. § 1.97(b)(2)).	
	1.97(b)(3)). No Office Action o under 37 C.F.F 1.97(e) below;	o fee or certification is un nother merits has been R. § 1.97(c) and see th or, if no certification ha	Action on the merits (37 C.F.R required. In the event that a fi issued, please consider this It he certification under 37 C.F.R. s been made, charge our deposes required by 37 C.F.R. § 1.17	irst DS . § osit
		•	Action after the filing of a reque R. § 1.114. No fee or certificati	
	В. <b>37 С.F.R. § 1.97</b>	(c): (check <u>only</u> one box	x)	
		of Allowance under 37	nal Office Action under 37 C.F.R C.F.R. § 1.311, or an action th	
	1. ☐ No certific by 37 C.F.R. § ′		the amount of \$180.00 is requir	·ed
	2. See the co	ertification below. No fe	e is required.	

	C. 37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
VI.	CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
	The undersigned hereby certifies that:
	A.   each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)).   See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or
	B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. 1.704(d)
	The undersigned hereby states that:
	each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

### VIII. PAYMENT OF FEES (check only one box)

- A. A check in the amount of \$180.00 is enclosed for the above identified fee.
- B. 

  Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: September 20, 2005

Michael D. Wiggins

Reg. No. 34,754

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

MDW/dls



DRW DP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET NO.	SERIAL NO.	
MP0426	10/814,534	
APPLICANT		
Aram, Farbod		
FILING DATE	GROUP	
March 31, 2004	2817	

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		6,466,091 B1	10/15/2002	Kejariwal, Murari et al		
2.		6,515,540 B1	2/4/2003	Prasad, Ammisetti et al		
3.		6,525,589 B1	2/25/2003	Thomsen, Axel et al		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translatio Yes	n No
1.							

OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)				
Ref. Desig.	Examiner's Initials				
1.		W. Grise, Dept. of IET, Morehead State University, Morehead, KY; Application of the Operational Transconductance Amplifier (OTA) to Voltage-controlled Amplifiers and Active Filters; 10 pages			
2.		Axel Thomsen, Dan Kasha, Wai Lee, Crystal Semiconductor Division, Cirrus Logic, Inc., Austin, Texas; A Five Stage Chopper Stabilized Instrumentation Amplifier Using Feedforward Compensation; 1998; 4 pages			
3.		Axel Thomsen, Edwin de Angel, Sherry Ziachong Wu, Aryesh Amar, Lei Wang, Wai Lee, WA 20.1 A DC Measurement IC with 130nV <sub>pp</sub> Noise in 10Hz; 2000 IEEE International Solid-State Circuits Conference; 9 pages			
4.		Axel Thomsen, Edwin de Angel, Sherry Ziachong Wu, Aryesh Amar, Lei Wang, Wai Lee, WA 20.1 A DC Measurement IC with 130nV <sub>pp</sub> Noise in 10Hz; ISSCC 2000/Session 20/Oversampled Converters/ Paper WA 20.1 ISSCC 2000 Slide Supplement; 5 pages			

Examiner:	Date Considered:

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(Use several sheets if necessary)

Sheet 2 of 2

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OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials			
5.		M. Moyal, M. Groepl, H. Werker, G. Mitteregger, J. Schambacher; Xignal Technologies AG, Munich, Germany; 23.6 A 700/900mW/Channel CMOS Dual Analog Front-End IC for VDSL with Integrated 11.5/14.5dBm Line Drivers; 2003 IEEE International Solid-State Circuits Conference; ISSCC 2003/Session 23/Mixed-Signal and Wireline Techniques; 10 pages		
6.		M. Moyal, M. Groepl, H. Werker, G. Mitteregger, J. Schambacher; Xignal Technologies AG, Munich, Germany; A 700/900mW/Channel CMOS Dual Analog Front-End IC for VDSL with Integrated 11.5/14.5dBm Line Drivers; Outline, Overview 24 pages		

Examiner:	Date Considered: